

## **DETAILED ACTION**

### ***Claims***

Claims 2-5 are canceled.

Claims 12-23 are new.

Claims 1 and 6 are amended.

Claims 1 and 6-23 are pending.

Claims 8-11 are withdrawn.

Claims 1, 6, 7, and 12-23 are under consideration in this action.

### ***Rejections***

Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue, and resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**1. Claims 1, 6, 7, and 12-23 are rejected under 35 U.S.C. 103(a)** as being unpatentable over EP 0979645 to Gonzenbach in view of US 2004/0047817 to Bonda et al.

***Applicant Claims***

Applicant claims a composition comprising a) a polysiloxane based UV filter, specifically polysilicone-15 (Parasol SLX) b) an additional UV agent selected from the list of claim 1, c) a carrier, and optionally d) an additional UV filter.

Applicant further claims specific additional UV filters, ratios for said UV filters, and recites 'consisting essentially of' language and 'consisting of' language.

***Determination of the Scope and Content of the Prior Art (MPEP §2141.01)***

Gonzenbach et al. teach light screening compositions comprising the same polysiloxane-based UV filters as claimed (page 1-5), which read on polysilicone-15 (Parasol SLX), the same additional UV filters as claimed including benzophenone-3 and methylene bis-benzotriazo tetramethylbutylphenol (Tinosorb M)) (page 6), a carrier (aqueous phase and fatty phase) (abstract), and percentages of said polysiloxane-bases UV filter and said additional UV filters as pertaining to the claimed ratio ( [19] and claim 8).

Gonzenbach et al. further teach octocrylene, Parasol MCX, benzophenone-3, microparticulated titanium dioxide, said oxide coated with aluminum oxide, NEO Heliopan OS (page 6 [27-28]), and does not require the use of 4,4',4''-(1,3,5-triazine-2,4,6-triyltriimino)-tris-benzoic-acid-tris(2-ethylhexylester).

***Ascertainment of the Difference between Scope the Prior Art and the Claims (MPEP §2141.012)***

Gonzenbach et al. do not teach percentages for Tinosorb M or that the percentage present for said polysiloxane based UV agent is less than the sum amount of UV filters b) and d) as pertaining to claim 7. This deficiency in Gonzenbach et al. is cured by Bonda. Bonda teaches that Tinosorb M is typically present up to 10% [36].

Gonzenbach et al. further do not teach the benzoic acid derivatives as recited in claim 14. This deficiency in Gonzenbach et al. is cured by Bonda. Bonda teaches sunscreen compositions comprising UV filters including p-aminobenzoic acid [30].

***Finding of Prima Facie Obviousness Rational and Motivation***

***(MPEP §2142-2143)***

Regarding claim 7, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the formulations of Gonzenbach et al. with, 10% phenylbenzimidazol 5% of said polysiloxane based UV agent , and 10% Tinosorb M as taught by Bonda et al. in order to produce the invention of instant claim 7.

One of ordinary skill in the art would have been motivated to do this because both references teach to UV agents such as Tinosorb M and Bonda teaches a preferred percentage limit for Tinosorb M. Therefore it would have been obvious to utilize up to and including the maximum preferred amount of Tinosorb M of Bonda, in the formulations of Gonzenbach et al. in order to use said components in known and preferred amounts. Since Bonda teaches 10% Tinosorb M, Gonzenbach et al. teach 10% phenylbenzimidazole as well as said polysiloxane UV agent preferably present at

20% and more preferably present at 5%, it would have been obvious to produce a formulation in which the combined amounts of Tinosorb M and phenylbenzimidazole are greater than the amount of said polysiloxane UV agent. It is noted by the examiner that optimization of UV agents is common in the art and would have been expected by one of ordinary skill. Applicants claims to ratios of 3 such UV components which are not explicitly disclosed, but are taught by the combination of references, is not novel or patentable absent a showing of unexpected results when said specific ratio is used.

Regarding claim 14, it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the formulations of Gonzenbach et al. with p-aminobenzoic acid as taught by Bonda et al. in order to produce the invention of instant claim 14.

One of ordinary skill in the art would have been motivated to do this because both references teach to sunscreen compositions with UV agents, Gonzenbach et al. teach p-aminobenzoic acid derivatives [27] and Bonda et al. teach that p-aminobenzoic acid or derivatives thereof may be used for UV filtering purposes. Therefore it would have been obvious to use the p-aminobenzoic acid of Bonda et al. in the formulations of Gonzenbach et al. in order to use a known UV filtering compound.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

**2. Claims 16 and 22 are rejected under 35 U.S.C. 103(a)** as being unpatentable over EP 0979645 to Gonzenbach and US 2004/0047817 to Bonda et al. in view of WO/2003/086340 to Berg-Schultz et al.

***Applicant Claims***

Applicant claims are delineated above and incorporated herein. Applicant further claims an ester of 2-(4-ethoxy-anilinomethylene) propandioic acid and Neoheliopan AP.

***Determination of the Scope and Content of the Prior Art (MPEP §2141.01)***

The teachings of Gonzenbach et al. are delineated above and incorporated herein. In particular Gonzenbach et al. teach the use of UV filters.

***Ascertainment of the Difference between Scope the Prior Art and the Claims (MPEP §2141.012)***

Gonzenbach et al. do not teach an ester of 2-(4-ethoxy-anilinomethylene) propandioic acid. This deficiency in Gonzenbach et al. is cured by Berg-Schultz et al. Berg-Schultz et al. teach sunscreen compositions comprising UV agents such as esters of 2-(4-ethoxy-anilinomethylene) propandioic acid (page 6, last paragraph).

Further, Gonzenbach et al. do not teach Neoheliopan AP. This deficiency is cured by Berg-Schultz et al. Berg-Schultz et al. teach sunscreen formulations comprising UV agents including Neoheliopan AP (page 7, second paragraph).

***Finding of Prima Facie Obviousness Rational and Motivation***  
***(MPEP §2142-2143)***

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to produce the formulations of Gonzenbach et al. with an ester of 2-(4-ethoxy-anilinomethylene) propandioic acid and Neoheliopan AP as taught by Berg-Schultz et al. in order to produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because both references are drawn to sunscreen formulations comprising UVA and UVB sunscreen agents and Berg-Schultz et al. teach that esters of 2-(4-ethoxy-anilinomethylene) propandioic acid and Neoheliopan AP may be used in sunscreen formulations for UV filtering purposes. Therefore it would have been obvious to utilize the ester of 2-(4-ethoxy-anilinomethylene) propandioic acid and Neoheliopan AP of Berg-Schultz et al., in the sunscreen formulations of Gonzenbach et al. in order to use UV agents known in the art to be used in sunscreen formulations.

From the teachings of the reference, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

***Response to Arguments***

Applicant's arguments filed 11/11/2011 have been fully considered but they are not persuasive.

Applicant argues that Gozenbach et al. teach a large laundry list of UV compounds.

This argument is not found persuasive because Gozenbach et al. only teach 33 specific UV compounds from page 6, line 29 through page 7, line 2. This is a limited and finite list and would not constitute a burden for one of ordinary skill in the art to try each one.

Applicant also states that "greater than expected results is an evidentiary factor pertinent to the legal conclusion of obviousness".

This statement does not pertain to the instant application as there is currently no showing of unexpected results. Applicant has provided no data to support an argument for unexpected results. The data supplied by applicant in arguments filed 11/11/2011 on page 12 is not a true side by side comparison. The examiner is unable to determine if there is unexpected result absent a side by side comparison. In the data supplied by applicant, more than one parameter is altered from example to example and therefore, any change in SPF cannot be attributed to the alteration of any one component. Therefore, the examiner cannot determine if the results are greater than additive, i.e. synergistic.

Applicant also argues that Gonzenbach requires 2-phenylbenzimidazole sulphonic acid and the instant claims do not.



This argument is not found persuasive because the instant claims use comprising language, which is open ended language and therefore reads on said compound. Regarding the 'consisting essentially of' language in claim 23, said phrase has not been defined in the specification and will be read as 'comprising'. For the purposes of searching for and applying prior art under 35 U.S.C. 102 and 103, absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to "comprising." See, e.g., PPG, 156 F.3d at 1355, 48 USPQ2d at 1355 ("PPG could have defined the scope of the phrase consisting essentially of for purposes of its patent by making clear in its specification what it regarded as constituting a material change in the basic and novel characteristics of the invention."). See also AK Steel Corp. v. Sollac, 344 F.3d 1234, 1240-41, 68 USPQ2d 1280, 1283-84 (Fed. Cir. 2003). Regarding the 'consisting of' language of claim 24, said claim recites a carrier, which may contain said compound.

### ***Conclusion***

Claims 1, 6, 7, and 12-23 are rejected.

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUKE KARPINSKI whose telephone number is (571)270-3501. The examiner can normally be reached on monday-friday 9-5 est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LEK

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